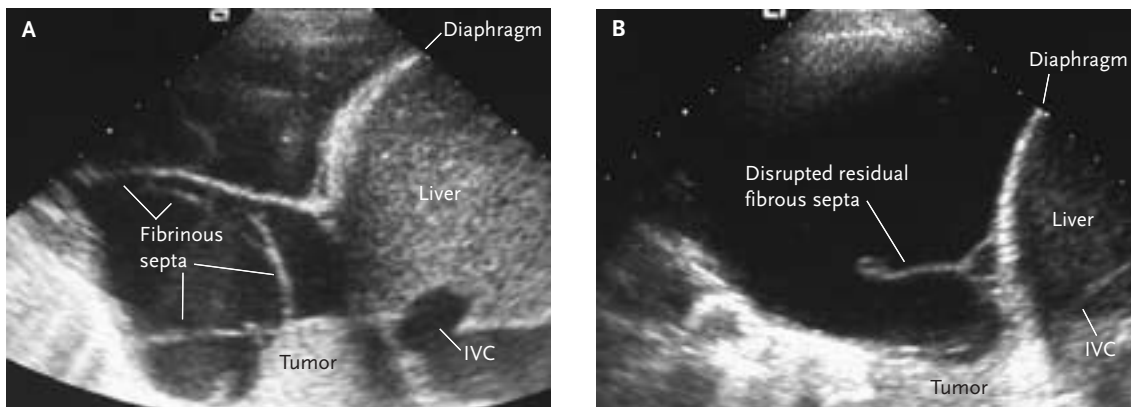


Effect of Intrapleural Streptokinase on a Loculated Malignant Pleural Effusion



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A 62-YEAR-OLD WOMAN WITH METASTATIC BREAST CARCINOMA PRESENTED with shortness of breath due to a left-sided malignant pleural effusion. A catheter placed in the pleural cavity failed to drain more than 250 ml of fluid over a 24-hour period. Ultrasonographic examination showed that numerous fibrinous septa were preventing drainage (Panel A and Video A). A 500,000-unit dose of streptokinase was instilled intrapleurally, and repeated ultrasonograms in the same position were obtained. Panel B and Video B show the ultrasonographic images 90 minutes after drug administration. After this single administration of streptokinase, an additional 1500 ml drained over the next 15 hours, with good lung reexpansion. The patient went on to undergo talc-slurry pleurodesis, which successfully controlled the effusion. These images document the action of streptokinase in breaking down fibrinous septae in a patient with a loculated malignant effusion. IVC denotes inferior vena cava.

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Video A. Dynamic Ultrasonographic Image of a Heavily Loculated Malignant Pleural Effusion.

A chest tube is visible.

Video B. Ultrasonogram Obtained 90 Minutes after the Administration of Streptokinase, Showing That Most of the Fibrinous Septa Had Been Broken Down.

Breakdown of the fibrinous septa then allowed complete pleural drainage and lung reexpansion before pleurodesis.